U/R

Work Order ID 149242 *149242* DRAB GREEN

Monday, July 25, 2016 12:49:31 PM

Item ID: D412-742-013DG **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: URF 16-572 **Stop** *NS2*

Item Name: Skidtube Fits LH or RH High Gear, DART (Apical) Tri-Bag Float Compatible, Drab Green

Start Date: 9/30/2016 **Start Qty:** 1.00 *1* **Cust Item ID:**

Required Date: 10/31/2016 **Req'd Qty:** 1.00 *1* **Customer:**

Reference:

Approvals: **Process Plan:** DAS 21 9-89 **Date:** JUL 25 2016 **Tooling:** _____ **Date:** _____ **Run Start** *NR1*

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____ **Stop** *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp

Draw Nbr	Revision Nbr
IIN D412-742	E OK 16/8/30

PK AUG 24 2016

100 *100* DC Doc.Control -USB or Paperwork	Document Control DOCUMENT CONTROL	0.00				DAS 27 9-89 OCT 17 2016			
	Memo Photocopy bluefile and create labels per PPP D412-742-013 CHG008	0.00	DAS 21 9-89 Chg008						
110 *110* Packaging Packaging	Pick Kit	0.00				1 PK	AUG 24 2016	DAS 28 9-89	
	Memo	0.00							
120 *120* QC Quality Control	QC4- 100% Inspect kits for completeness	0.00				DAS 27 9-89 OCT 17 2016			
	Memo	0.00							

B149277

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No.

DISPOSITION

Rework	☐
Scrap	☐
Use-as-is	☐
Suspected Unapproved	☐

AGAINST DEPARTMENT/PROCESS

Skid-tube	☐	Cross tube	☐	Water Jet	☐	Engineering	☐
Machining	☐	Small Fab	☐	Prod. Eng. Coor.	☐	Quality	☐
Thermoforming	☐	Finishing	☐	Rec/Store/Packaging	☐	Other	☐
Large Fab	☐	Composite	☐	Supplier	☐		

Date :	Step #:	QTY Effective :	MRB (QSI042) Approval

Description Work Order Deviation	Disposition	Completed By
		Lead hand / Supervisor Approval Verification
		QC / QA Coordinator Approval

Root Cause

Environment	☐	☐	No Re-verfication
Design	☐	☐	Operator
Doc/Data	☐	☐	Offset/Setup
Equip/Tooling	☐	☐	Supplier
Handling/Pre	☐	☐	Training
Material	☐	☐	Use for Testing
Internal Transport	☐	☐	Poor Information
Tribal Knowledge	☐	☐	Rushing
LOA	☐	☐	Product Improvement
Substation	☐	☐	Process Improvement
Past Expiry Date	☐	☐	Manufacturing Process
Misidentified	☐	☐	Past Due

FAULT CATEGORY

☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong
☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions
☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance
☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect
☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing
☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved
☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing
☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish
☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread
☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence

☐ OTHER :

Item ID: D412-742-013DG **Accept** *N900040100* **Setup Start** *NS1*
Revision ID: URF 16-572 **Stop** *NS2*
Item Name: Skidtube Fits LH or RH High Gear, DART (Apical) Tri-Bag Float Compatible, Drab Green

Start Date: 9/30/2016 **Start Qty:** 1.00 *1* **Cust Item ID:**
Required Date: 10/31/2016 **Req'd Qty:** 1.00 *1* **Customer:**
Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*
Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Packaging	0.00				DAS 27 9-89			
130						DAS 28 9-89			
Packaging	**Memo**	0.00							
Packaging	Identify and pack for shipping as per PPP D412-742-013 Location: _____ Sold								
						OCT 17 2016			
140	QC21- Final Inspection - Work Order Release	0.00							
140						DAS 21 9-89		OCT 18 2016	
QC	**Memo**	0.02							
Quality Control									
						DAS 21 9-89		OCT 18 2016	

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No.

DISPOSITION

Rework	☐
Scrap	☐
Use-as-is	☐
Suspected Unapproved	☐

AGAINST DEPARTMENT/PROCESS

Skid-tube	☐	Cross tube	☐	Water Jet	☐	Engineering	☐
Machining	☐	Small Fab	☐	Prod. Eng. Coor.	☐	Quality	☐
Thermoforming	☐	Finishing	☐	Rec/Store/Packaging	☐	Other	☐
Large Fab	☐	Composite	☐	Supplier	☐		☐

Date :	Step #:	QTY Effective :	MRB (QSI042) Approval

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Root Cause

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Doc/Data	☐	☐	Offset/Setup
Equip/Tooling	☐	☐	Supplier
Handling/Pre	☐	☐	Training
Material	☐	☐	Use for Testing
Internal Transport	☐	☐	Poor Information
Tribal Knowledge	☐	☐	Rushing
LOA	☐	☐	Product Improvement
Substation	☐	☐	Process Improvement
Past Expiry Date	☐	☐	Manufacturing Process
Misidentified	☐	☐	Past Due

FAULT CATEGORY

☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong
☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions
☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance
☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect
☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing
☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved
☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing
☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish
☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread
☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence

☐ OTHER :

Picklist Print

Monday, July 25, 2016 12:49:30 PM

Work Order ID: 149242 *149242*

Parent Item: D412-742-013DG *D412-742-013DG*

Parent Item Name: Skidtube Fits LH or RH High Gear, DART (Apical) Tri-Bag Float Compatible, Drab Green

Start Date: 9/30/2016 **Required Date:** 10/31/2016

Start Qty: 1.00 **Required Qty:** 1.00

Comments: IPP Rev: A05.10.13New Issue KJ/JLM
IPP Rev:B 06-06-08 As per DSI9336 JLM IPP RevC
07-12-03 ECN 1072 DD verified by:JLM
IPP Rev:D 08-09-08 ecn 08-510 DD verified by:EC
IPP Rev:E 09-01-23 as per DSI9441 DD verified by:EC IPP RevF: add AN4C7A DD 10.01.13 verified by:EC IPP Rev:G 11.11.01 as per DSI9517 REV.B DD verified by:EC IPP rev:H 12.01.12 PER IIN REV.E DD VERF: IPP Rev:I add AN4C47A DD 12.03.14 verified by:EC

Component Item ID / Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN4C47A		Purchased	No			110	Each	36.0000	4	4			
AN4C47A									**		PC	DAS 28 9-89	
Bolt													

Location	Loc Qty	Loc Code
FG	10	
122491	10	
ST341	26	
m135054	26	

DAS 27 9-89

D412-742-043		Manufactured	No			110	Each	0.0000	1	1			
D412-742-043									**		B149277	DAS 28 9-89	
Repl. Skidtube Fits LH or RH, High Gear, DART (Apical) Tri-Bag Float Comp.													
D2571		Manufactured	No			110	Each	20.0000	1	1			
D2571									**		M1194	DAS 6 9-89	SEP 30 2016 DAS 28 9-89
Saddle, Fwd, Out													

Location	Loc Qty	Loc Code
ST397	20	
145430	6	
146671	6	
147874	8	

DAS 27 9-89

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No.

DISPOSITION

Rework	☐
Scrap	☐
Use-as-is	☐
Suspected Unapproved	☐

AGAINST DEPARTMENT/PROCESS

Skid-tube	☐	Cross tube	☐	Water Jet	☐
Machining	☐	Small Fab	☐	Prod. Eng. Coor.	☐
Thermoforming	☐	Finishing	☐	Rec/Store/Packaging	☐
Large Fab	☐	Composite	☐	Supplier	☐

Engineering	☐		
Quality	☐		
Other	☐		

Date :

Step #:

QTY Effective :

MRB (QSI042) Approval

Description Work Order Deviation

Disposition

Completed By

Lead hand / Supervisor Approval Verification

QC / QA Coordinator Approval

Root Cause

Environment	☐	☐	No Re-verification
Design	☐	☐	Operator
Doc/Data	☐	☐	Offset/Setup
Equip/Tooling	☐	☐	Supplier
Handling/Pre	☐	☐	Training
Material	☐	☐	Use for Testing
Internal Transport	☐	☐	Poor Information
Tribal Knowledge	☐	☐	Rushing
LOA	☐	☐	Product Improvement
Substation	☐	☐	Process Improvement
Past Expiry Date	☐	☐	Manufacturing Process
Misidentified	☐	☐	Past Due

FAULT CATEGORY

☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong
☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions
☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance
☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect
☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing
☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved
☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing
☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish
☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread
☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence

☐ OTHER :

Work Order ID: 149242 *149242*
Parent Item: D412-742-013DG *D412-742-013DG*
Parent Item Name: Skidtube Fits LH or RH High Gear, DART (Apical) Tri-Bag Float Compatible, Drab Green
Start Date: 9/30/2016 **Required Date:** 10/31/2016
Start Qty: 1.00 **Required Qty:** 1.00

D2572	Manufactured	No		110	Each	22.0000	1	1	
D2572 Saddle, Fwd, In							**	149270	OCT 17 2016

Location	Loc Qty	Loc Code
ST397	22	
144676	8	
147969	8	
148097	6	

D2573	Manufactured	No		110	Each	11.0000	1	1	
D2573 Saddle, Aft, Out							**	145271	SEP 30 2016

Location	Loc Qty	Loc Code
ST398	11	
148005	11	

D2574	Manufactured	No		110	Each	15.0000	1	1	
D2574 Saddle, Aft, In							**	149263	OCT 17 2016

Location	Loc Qty	Loc Code
ST398	15	
148098	12	
148099	3	

D2876	Manufactured	No		110	Each	131.0000	2	2	
D2876 Saddle Spacer							**		AUG 2 6 2016

Location	Loc Qty	Loc Code
ST013	43	
147179	43	
ST025A	88	
145692	88	

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No.

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube	☐	Cross tube	☐	Water Jet	☐	Engineering	☐
Machining	☐	Small Fab	☐	Prod. Eng. Coor.	☐	Quality	☐
Thermoforming	☐	Finishing	☐	Rec/Store/Packaging	☐	Other	☐
Large Fab	☐	Composite	☐	Supplier	☐		☐

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		Lead hand / Supervisor Approval Verification
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Root Cause

Environment	☐	☐	No Re-verfication
Design	☐	☐	Operator
Doc/Data	☐	☐	Offset/Setup
Equip/Tooling	☐	☐	Supplier
Handling/Pre	☐	☐	Training
Material	☐	☐	Use for Testing
Internal Transport	☐	☐	Poor Information
Tribal Knowledge	☐	☐	Rushing
LOA	☐	☐	Product Improvement
Substation	☐	☐	Process Improvement
Past Expiry Date	☐	☐	Manufacturing Process
Misidentified	☐	☐	Past Due

FAULT CATEGORY

☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence

☐ OTHER :

Picklist Print

Monday, July 25, 2016 12:49:30 PM

Work Order ID: 149242 *149242*

Parent Item: D412-742-013DG *D412-742-013DG*

Parent Item Name: Skidtube Fits LH or RH High Gear, DART (Apical) Tri-Bag Float Compatible, Drab Green

Start Date: 9/30/2016 **Required Date:** 10/31/2016

Start Qty: 1.00 **Required Qty:** 1.00

D2877	Manufactured	No		110	Each	82.0000	2	**	2

D2877

Saddle Spacer

DAS 27 9-89

Location	Loc Qty	Loc Code
ST013	38	
145949	38	
ST025A	44	
147970	44	

DAS 28 9-89

D3403-1	Manufactured	No		110	Each	75.0000	8	**	8

D3403-1

Bushing

DAS 27 9-89

Location	Loc Qty	Loc Code
ST034	75	
144669	12	
147893	63	

DAS 28 9-89

D3403-5	Manufactured	No		110	Each	49.0000	8	**	8

D3403-5

Bushing

DAS 27 9-89

Location	Loc Qty	Loc Code
ST035	49	
145091	7	
146518	42	

DAS 28 9-89

D2747	Manufactured	No		110	Each	114.0000	4	**	4

D2747

Set Screw

DAS 27 9-89

Location	Loc Qty	Loc Code
ST010	64	
143803	64	
ST012a	50	
147938	50	

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order: _____

Part No. _____

NCR No.

DISPOSITION

Rework	☐
Scrap	☐
Use-as-is	☐
Suspected Unapproved	☐

AGAINST DEPARTMENT/PROCESS

Skid-tube	☐	Cross tube	☐	Water Jet	☐	Engineering	☐
Machining	☐	Small Fab	☐	Prod. Eng. Coor.	☐	Quality	☐
Thermoforming	☐	Finishing	☐	Rec/Store/Packaging	☐	Other	☐
Large Fab	☐	Composite	☐	Supplier	☐		☐

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Root Cause

Environment	☐	☐	No Re-verfication
Design	☐	☐	Operator
Doc/Data	☐	☐	Offset/Setup
Equip/Tooling	☐	☐	Supplier
Handling/Pre	☐	☐	Training
Material	☐	☐	Use for Testing
Internal Transport	☐	☐	Poor Information
Tribal Knowledge	☐	☐	Rushing
LOA	☐	☐	Product Improvement
Substation	☐	☐	Process Improvement
Past Expiry Date	☐	☐	Manufacturing Process
Misidentified	☐	☐	Past Due

FAULT CATEGORY

☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong
☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions
☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance
☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect
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Picklist Print

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Work Order ID: 149242 *149242*

Parent Item: D412-742-013DG *D412-742-013DG*

Parent Item Name: Skidtube Fits LH or RH High Gear, DART (Apical) Tri-Bag Float Compatible, Drab Green

Start Date: 9/30/2016 **Required Date:** 10/31/2016

Start Qty: 1.00 **Required Qty:** 1.00

D3533-1	Manufactured	No		110	Each	97.0000	2	2	

D3533-1

Set Screw

DAS 27 9-89

PC DAS 28 9-89

Location	Loc Qty	Loc Code	
ST041	97		
147393	47		2
148836	50		

AN4C6A	Purchased	No		110	Each	389.0000	16	16	

AN4C6A

Bolt

PC DAS 28 9-89

Location	Loc Qty	Loc Code	
FG	14		
103344	4		
121657	10		
OVER002	50		
m135297	50		
ST345	325		
m134861	75		
m134955	150		
m135127	100		16

DAS 27 9-89

AN4C53A	Purchased	No		110	Each	21.0000	4	4	

AN4C53A

BOLT

3x M135336 PC DAS 28 9-89

Location	Loc Qty	Loc Code	
ST340	21		
m132795	1		
m134934	20		1

DAS 27 9-89

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WORK ORDER NON-CONFORMANCE / UPDATE

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DISPOSITION

Rework	☐
Scrap	☐
Use-as-is	☐
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AGAINST DEPARTMENT/PROCESS

Skid-tube	☐	Cross tube	☐	Water Jet	☐	Engineering	☐
Machining	☐	Small Fab	☐	Prod. Eng. Coor.	☐	Quality	☐
Thermoforming	☐	Finishing	☐	Rec/Store/Packaging	☐	Other	☐
Large Fab	☐	Composite	☐	Supplier	☐		☐

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Doc/Data	☐	☐	Offset/Setup
Equip/Tooling	☐	☐	Supplier
Handling/Pre	☐	☐	Training
Material	☐	☐	Use for Testing
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☐ OTHER :

Work Order ID: 149242 *149242*
Parent Item: D412-742-013DG *D412-742-013DG*
Parent Item Name: Skidtube Fits LH or RH High Gear, DART (Apical) Tri-Bag Float Compatible, Drab Green
Start Date: 9/30/2016 **Required Date:** 10/31/2016
Start Qty: 1.00 **Required Qty:** 1.00

AN4C52A	Purchased	No		110	Each	34.0000	4	4

AN4C52A
Bolt

DAS 28 9-89

Location	Loc Qty	Loc Code
FG	5	
122518	5	
ST340	29	
M134130	14	
M134131	15	

DAS 27 9-89

AN6C12A	Purchased	No		110	Each	68.0000	8	8

AN6C12A
Bolt

DAS 28 9-89

Location	Loc Qty	Loc Code
ST335	68	
M134573	18	
M135056	50	

DAS 27 9-89

D3672-3	Manufactured	No		110	Each	1,204.000	32	32

D3672-3
Washer, Phenolic

DAS 28 9-89

Location	Loc Qty	Loc Code
FG	100	
133083	52	
134449	48	
FP001	213	
132639	213	
ST049	391	
146277	391	
ST051A	500	
148691	500	

DAS 27 9-89

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No.

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube	☐	Cross tube	☐	Water Jet	☐	Engineering	☐
Machining	☐	Small Fab	☐	Prod. Eng. Coor.	☐	Quality	☐
Thermoforming	☐	Finishing	☐	Rec/Store/Packaging	☐	Other	☐
Large Fab	☐	Composite	☐	Supplier	☐		☐

Date :

Step #:

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MRB (QSI042) Approval

Description Work Order Deviation

Disposition

Completed By

Lead hand / Supervisor Approval Verification

QC / QA Coordinator Approval

Root Cause

Environment	☐	☐	No Re-verfication
Design	☐	☐	Operator
Doc/Data	☐	☐	Offset/Setup
Equip/Tooling	☐	☐	Supplier
Handling/Pre	☐	☐	Training
Material	☐	☐	Use for Testing
Internal Transport	☐	☐	Poor Information
Tribal Knowledge	☐	☐	Rushing
LOA	☐	☐	Product Improvement
Substation	☐	☐	Process Improvement
Past Expiry Date	☐	☐	Manufacturing Process
Misidentified	☐	☐	Past Due

FAULT CATEGORY

☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong
☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions
☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance
☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect
☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing
☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved
☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing
☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish
☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread
☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence

☐ OTHER :

Work Order ID: 149242 *149242*
Parent Item: D412-742-013DG *D412-742-013DG*
Parent Item Name: Skidtube Fits LH or RH High Gear, DART (Apical) Tri-Bag Float Compatible, Drab Green
Start Date: 9/30/2016 **Required Date:** 10/31/2016
Start Qty: 1.00 **Required Qty:** 1.00

NAS1149C0432R	Purchased	No		110	Each	1,977.000	32	32	

NAS1149C0432R
WASHER

DAS 28 9-89

Location	Loc Qty	Loc Code	
GA	801		
m125807	427		
m134676	374		
ST266	1176		
m134676	176		
m135297	1000		32

DAS 27 9-89

D3672-9	Manufactured	No		110	Each	711.0000	8	8	

D3672-9
Washer

DAS 28 9-89

Location	Loc Qty	Loc Code	
ST049	181		
114963	181		8
ST051A	530		
133084	530		

DAS 27 9-89

NAS1149C0632R	Purchased	No		110	Each	176.0000	8	8	

NAS1149C0632R
WASHER

DAS 28 9-89

AUG 25 2016

Location	Loc Qty	Loc Code	
ST266	176		
M133363	26		
M135118	150		8

DAS 27 9-89

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No.

DISPOSITION

Rework	☐
Scrap	☐
Use-as-is	☐
Suspected Unapproved	☐

AGAINST DEPARTMENT/PROCESS

Skid-tube	☐	Cross tube	☐	Water Jet	☐	Engineering	☐
Machining	☐	Small Fab	☐	Prod. Eng. Coor.	☐	Quality	☐
Thermoforming	☐	Finishing	☐	Rec/Store/Packaging	☐	Other	☐
Large Fab	☐	Composite	☐	Supplier	☐		☐

Date :	Step #:	QTY Effective :	MRB (QSI042) Approval

Description Work Order Deviation	Disposition	Completed By
		Lead hand / Supervisor Approval Verification
		QC / QA Coordinator Approval

Root Cause

Environment	☐	☐	No Re-verfication
Design	☐	☐	Operator
Doc/Data	☐	☐	Offset/Setup
Equip/Tooling	☐	☐	Supplier
Handling/Pre	☐	☐	Training
Material	☐	☐	Use for Testing
Internal Transport	☐	☐	Poor Information
Tribal Knowledge	☐	☐	Rushing
LOA	☐	☐	Product Improvement
Substation	☐	☐	Process Improvement
Past Expiry Date	☐	☐	Manufacturing Process
Misidentified	☐	☐	Past Due

FAULT CATEGORY

☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong
☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions
☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance
☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect
☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing
☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved
☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing
☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish
☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread
☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence

☐ OTHER :

Work Order ID: 149242 *149242*
Parent Item: D412-742-013DG *D412-742-013DG*
Parent Item Name: Skidtube Fits LH or RH High Gear, DART (Apical) Tri-Bag Float Compatible, Drab Green
Start Date: 9/30/2016 **Required Date:** 10/31/2016
Start Qty: 1.00 **Required Qty:** 1.00

D3672-11	Manufactured	No		110	Each	445.0000	8	8
D3672-11						**		
Washer								

Location	Loc Qty	Loc Code
FG	10	
77483	10	
ST049	435	
133082	435	

DAS 27 9-89

PC DAS 28 9-89

8

MS21043-4	Purchased	No		110	Each	753.0000	29	29
MS21043-4						**		
Nut								

Location	Loc Qty	Loc Code
FG	40	
104603	40	
GA	17	
m132803	17	
OVER007	300	
m134754	300	
ST302	396	
m134502	96	
m134943	300	

DAS 27 9-89

PC DAS 28 9-89

29

D3403-3	Manufactured	No		110	Each	35.0000	8	8
D3403-3						**		
Bushing								

Location	Loc Qty	Loc Code
ST034	35	
146070	35	

DAS 27 9-89

X B1Sc502 PC DAS 28 9-89

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No.

DISPOSITION

Rework	☐
Scrap	☐
Use-as-is	☐
Suspected Unapproved	☐

AGAINST DEPARTMENT/PROCESS

Skid-tube	☐	Cross tube	☐	Water Jet	☐	Engineering	☐
Machining	☐	Small Fab	☐	Prod. Eng. Coor.	☐	Quality	☐
Thermoforming	☐	Finishing	☐	Rec/Store/Packaging	☐	Other	☐
Large Fab	☐	Composite	☐	Supplier	☐		☐

Date :	Step #:	QTY Effective :	MRB (QSI042) Approval

Description Work Order Deviation	Disposition	Completed By
		Lead hand / Supervisor Approval Verification
		QC / QA Coordinator Approval

Root Cause

Environment	☐	☐	No Re-verification
Design	☐	☐	Operator
Doc/Data	☐	☐	Offset/Setup
Equip/Tooling	☐	☐	Supplier
Handling/Pre	☐	☐	Training
Material	☐	☐	Use for Testing
Internal Transport	☐	☐	Poor Information
Tribal Knowledge	☐	☐	Rushing
LOA	☐	☐	Product Improvement
Substation	☐	☐	Process Improvement
Past Expiry Date	☐	☐	Manufacturing Process
Misidentified	☐	☐	Past Due

FAULT CATEGORY

☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong
☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions
☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance
☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect
☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing
☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved
☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing
☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish
☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread
☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence

☐ OTHER :

Work Order ID: 149242 *149242*
Parent Item: D412-742-013DG *D412-742-013DG*
Parent Item Name: Skidtube Fits LH or RH High Gear, DART (Apical) Tri-Bag Float Compatible, Drab Green
Start Date: 9/30/2016 **Required Date:** 10/31/2016
Start Qty: 1.00 **Required Qty:** 1.00

D3405-041	Manufactured	No		110	Each	5.0000	1	1	DAS 6 9-89 SEP 30 2016 DAS 28 9-89
D3405-041							**	149291	
Ground Handling Lug									
DAS 27 9-89			**Location**		**Loc Qty**	**Loc Code**			
			st529		5				
				145753	1				
				146842	4				
D3405-043	Manufactured	No		110	Each	7.0000	1	1	DAS 6 9-89 SEP 30 2016 DAS 28 9-89
D3405-043							**	149207	
Ground Handling Lug									
DAS 27 9-89			**Location**		**Loc Qty**	**Loc Code**			
			st529		7				
				145740	6				
				145741	1				
AN4C7A	Purchased	No		110	Each	64.0000	4	4	DAS 28 9-89
AN4C7A							**		
BOLT									
			Location		**Loc Qty**	**Loc Code**			
			OVER002		60				
DAS 27 9-89				m134861	60			4	
			ST345		4				
				m133523	4				
D3407-041	Manufactured	No		110	Each	11.0000	1	1	DAS 6 9-89 SEP 30 2016 DAS 28 9-89
D3407-041							**		
Tow Ring									
DAS 27 9-89			**Location**		**Loc Qty**	**Loc Code**		149287	
			st530		11				
				145442	1				
				147290	10				

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order update only ☐

Work Order: _____

Part No. _____

NCR No.

DISPOSITION

Rework	☐
Scrap	☐
Use-as-is	☐
Suspected Unapproved	☐

AGAINST DEPARTMENT/PROCESS

Skid-tube	☐	Cross tube	☐	Water Jet	☐	Engineering	☐
Machining	☐	Small Fab	☐	Prod. Eng. Coor.	☐	Quality	☐
Thermoforming	☐	Finishing	☐	Rec/Store/Packaging	☐	Other	☐
Large Fab	☐	Composite	☐	Supplier	☐		☐

Date :	Step #:	QTY Effective :	MRB (QSI042) Approval

Description Work Order Deviation	Disposition	Completed By
		Lead hand / Supervisor Approval Verification
		QC / QA Coordinator Approval

Root Cause

Environment	☐	☐	No Re-verfication
Design	☐	☐	Operator
Doc/Data	☐	☐	Offset/Setup
Equip/Tooling	☐	☐	Supplier
Handling/Pre	☐	☐	Training
Material	☐	☐	Use for Testing
Internal Transport	☐	☐	Poor Information
Tribal Knowledge	☐	☐	Rushing
LOA	☐	☐	Product Improvement
Substation	☐	☐	Process Improvement
Past Expiry Date	☐	☐	Manufacturing Process
Misidentified	☐	☐	Past Due

FAULT CATEGORY

☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong
☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions
☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance
☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect
☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing
☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved
☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing
☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish
☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread
☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence

☐ OTHER :

Work Order ID: 149242 *149242*
Parent Item: D412-742-013DG *D412-742-013DG*
Parent Item Name: Skidtube Fits LH or RH High Gear, DART (Apical) Tri-Bag Float Compatible, Drab Green
Start Date: 9/30/2016 **Required Date:** 10/31/2016

						Start Qty: 1.00		**Required Qty:** 1.00	
D3417-3	Manufactured	No		110	Each	54.0000	2	2	

D3417-3
Washer

Location	Loc Qty	Loc Code
FG	7	
33519	7	
ST035	24	
139518	24	
ST038A	23	
149290	23	

DAS 27 9-89

DAS 28 9-89

D3456-1	Manufactured	No		110	Each	87.0000	1	1	

D3456-1
Washer

Location	Loc Qty	Loc Code
FG	7	
25701	7	
ST037	5	
144158	5	
ST038A	75	
147066	25	
147799	50	

DAS 27 9-89

B/149710

DAS 28 9-89

AN3C37A	Purchased	No		110	Each	278.0000	1	1	

AN3C37A
BOLT

Location	Loc Qty	Loc Code
OVER002	210	
M131856	70	
M132169	70	
M132381	70	
ST347	68	
131651	68	

DAS 27 9-89

DAS 28 9-89

AUG 2 4 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No.

DISPOSITION

Rework	☐
Scrap	☐
Use-as-is	☐
Suspected Unapproved	☐

AGAINST DEPARTMENT/PROCESS

Skid-tube	☐	Cross tube	☐	Water Jet	☐	Engineering	☐
Machining	☐	Small Fab	☐	Prod. Eng. Coor.	☐	Quality	☐
Thermoforming	☐	Finishing	☐	Rec/Store/Packaging	☐	Other	☐
Large Fab	☐	Composite	☐	Supplier	☐		☐

Date :	Step #:	QTY Effective :	MRB (QSI042) Approval

Description Work Order Deviation	Disposition	Completed By
		Lead hand / Supervisor Approval Verification
		QC / QA Coordinator Approval

Root Cause

Environment	☐	☐	No Re-verification
Design	☐	☐	Operator
Doc/Data	☐	☐	Offset/Setup
Equip/Tooling	☐	☐	Supplier
Handling/Pre	☐	☐	Training
Material	☐	☐	Use for Testing
Internal Transport	☐	☐	Poor Information
Tribal Knowledge	☐	☐	Rushing
LOA	☐	☐	Product Improvement
Substation	☐	☐	Process Improvement
Past Expiry Date	☐	☐	Manufacturing Process
Misidentified	☐	☐	Past Due

FAULT CATEGORY

☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong
☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions
☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance
☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect
☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing
☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved
☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing
☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish
☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread
☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence

☐ OTHER :

Work Order ID: 149242 *149242*
Parent Item: D412-742-013DG *D412-742-013DG*
Parent Item Name: Skidtube Fits LH or RH High Gear, DART (Apical) Tri-Bag Float Compatible, Drab Green
Start Date: 9/30/2016 **Required Date:** 10/31/2016
Start Qty: 1.00 **Required Qty:** 1.00

AN3C40A	Purchased	No		110	Each	33.0000	1	1

AN3C40A
Bolt

**

PC DAS 28 9-89

Location	Loc Qty	Loc Code	
FG	5		
11442	5		
ST347	28		
m134528	8		1
m134627	20		

DAS 27 9-89

AN3C41A	Purchased	No		110	Each	302.0000	1	1

AN3C41A
Bolt

**

PC DAS 28 9-89

Location	Loc Qty	Loc Code	
FG	10		
122843	5		
124975	1		
m130081	4		
OVER002	225		1
m132169	75		
m132381	75		
m132522	75		
ST347	67		
131651	67		

DAS 27 9-89

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No.

DISPOSITION

Rework	☐
Scrap	☐
Use-as-is	☐
Suspected Unapproved	☐

AGAINST DEPARTMENT/PROCESS

Skid-tube	☐	Cross tube	☐	Water Jet	☐	Engineering	☐
Machining	☐	Small Fab	☐	Prod. Eng. Coor.	☐	Quality	☐
Thermoforming	☐	Finishing	☐	Rec/Store/Packaging	☐	Other	☐
Large Fab	☐	Composite	☐	Supplier	☐		☐

Date :

Step #:

QTY Effective :

MRB (QSI042) Approval

Description Work Order Deviation

Disposition

Completed By

Lead hand / Supervisor Approval Verification

QC / QA Coordinator Approval

Root Cause

Environment	☐	☐	No Re-verfication
Design	☐	☐	Operator
Doc/Data	☐	☐	Offset/Setup
Equip/Tooling	☐	☐	Supplier
Handling/Pre	☐	☐	Training
Material	☐	☐	Use for Testing
Internal Transport	☐	☐	Poor Information
Tribal Knowledge	☐	☐	Rushing
LOA	☐	☐	Product Improvement
Substation	☐	☐	Process Improvement
Past Expiry Date	☐	☐	Manufacturing Process
Misidentified	☐	☐	Past Due

FAULT CATEGORY

☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong
☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions
☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance
☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect
☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing
☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved
☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing
☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish
☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread
☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence

☐ OTHER :

Work Order ID: 149242 *149242*
Parent Item: D412-742-013DG *D412-742-013DG*
Parent Item Name: Skidtube Fits LH or RH High Gear, DART (Apical) Tri-Bag Float Compatible, Drab Green
Start Date: 9/30/2016 **Required Date:** 10/31/2016
Start Qty: 1.00 **Required Qty:** 1.00

AN3C42A	Purchased	No		110	Each	73.0000	1	1

AN3C42A
Bolt

Location	Loc Qty	Loc Code	
FG	5		
121103	5		
OVER002	40		
m133336	10		
m133920	10		
m134131	10		
m134133	10		
ST338a	3		
m130485	3		
ST346	5		
m132522	5		
ST347	20		
m132674	10		1
m133091	10		

DAS 27 9-89

DAS 28 9-89

AN3C43A	Purchased	No		110	Each	35.0000	4	4

AN3C43A
Bolt

135603x1

Location	Loc Qty	Loc Code	
FG	10		
120465	10		
ST346	25		
m133363	2		
m135058	23		3

DAS 27 9-89

DAS 28 9-89

AUG 24 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No.

DISPOSITION

Rework	☐
Scrap	☐
Use-as-is	☐
Suspected Unapproved	☐

AGAINST DEPARTMENT/PROCESS

Skid-tube	☐	Cross tube	☐	Water Jet	☐	Engineering	☐
Machining	☐	Small Fab	☐	Prod. Eng. Coor.	☐	Quality	☐
Thermoforming	☐	Finishing	☐	Rec/Store/Packaging	☐	Other	☐
Large Fab	☐	Composite	☐	Supplier	☐		☐

Date :	Step #:	QTY Effective :	MRB (QSI042) Approval

Description Work Order Deviation	Disposition	Completed By
		Lead hand / Supervisor Approval Verification
		QC / QA Coordinator Approval

Root Cause

Environment	☐	☐	No Re-verfication
Design	☐	☐	Operator
Doc/Data	☐	☐	Offset/Setup
Equip/Tooling	☐	☐	Supplier
Handling/Pre	☐	☐	Training
Material	☐	☐	Use for Testing
Internal Transport	☐	☐	Poor Information
Tribal Knowledge	☐	☐	Rushing
LOA	☐	☐	Product Improvement
Substation	☐	☐	Process Improvement
Past Expiry Date	☐	☐	Manufacturing Process
Misidentified	☐	☐	Past Due

FAULT CATEGORY

☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong
☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions
☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance
☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect
☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing
☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved
☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing
☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish
☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread
☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence

☐ OTHER :

Work Order ID: 149242 *149242*
Parent Item: D412-742-013DG *D412-742-013DG*
Parent Item Name: Skidtube Fits LH or RH High Gear, DART (Apical) Tri-Bag Float Compatible, Drab Green
Start Date: 9/30/2016 **Required Date:** 10/31/2016
Start Qty: 1.00 **Required Qty:** 1.00

AN3C46A	Purchased	No	110	Each	254.0000	5	5	PC DAS 28 9-89

AN3C46A
Bolt

Location	Loc Qty	Loc Code	
FG	10		
122843	10		
OVER002	140		
134795	70		
M134794	70		
ST346	104		
M132522	33		
M133917	21		
M134591	50		5

DAS 27 9-89

NAS1149C0332R	Purchased	No	110	Each	4,798.000	26	26	PC DAS 28 9-89

NAS1149C0332R
WASHER

Location	Loc Qty	Loc Code	
FP001	1366		
m135046	1366		
GA	141		
m133284	141		
ST266	3291		
m134736	1291		26
m135274	2000		

DAS 27 9-89

AUG 2 4 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No.

DISPOSITION

Rework	☐
Scrap	☐
Use-as-is	☐
Suspected Unapproved	☐

AGAINST DEPARTMENT/PROCESS

Skid-tube	☐	Cross tube	☐	Water Jet	☐	Engineering	☐
Machining	☐	Small Fab	☐	Prod. Eng. Coor.	☐	Quality	☐
Thermoforming	☐	Finishing	☐	Rec/Store/Packaging	☐	Other	☐
Large Fab	☐	Composite	☐	Supplier	☐		☐

Date :	Step #:	QTY Effective :	MRB (QSI042) Approval

Description Work Order Deviation	Disposition	Completed By
		Lead hand / Supervisor Approval Verification
		QC / QA Coordinator Approval

Root Cause

Environment	☐	☐	No Re-verfication
Design	☐	☐	Operator
Doc/Data	☐	☐	Offset/Setup
Equip/Tooling	☐	☐	Supplier
Handling/Pre	☐	☐	Training
Material	☐	☐	Use for Testing
Internal Transport	☐	☐	Poor Information
Tribal Knowledge	☐	☐	Rushing
LOA	☐	☐	Product Improvement
Substation	☐	☐	Process Improvement
Past Expiry Date	☐	☐	Manufacturing Process
Misidentified	☐	☐	Past Due

FAULT CATEGORY

☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong
☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions
☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance
☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect
☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing
☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved
☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing
☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish
☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread
☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence

☐ OTHER :

Work Order ID: 149242 *149242*

Parent Item: D412-742-013DG *D412-742-013DG*

Parent Item Name: Skidtube Fits LH or RH High Gear, DART (Apical) Tri-Bag Float Compatible, Drab Green

Start Date: 9/30/2016 **Required Date:** 10/31/2016

Start Qty: 1.00 **Required Qty:** 1.00

MS21043-3	Purchased	No		110	Each	920.0000	13	13

MS21043-3

Nut

**

DAS 28 9-89

Location	Loc Qty	Loc Code	
FG	80		
103691	80		
FP001	11		
m130673	11		
GA	237		
m133990	237		
OVER007	400		
m135058	400		13
ST302	86		
m134861	86		
ST304	106		
m131340	106		

DAS 27 9-89

AUG 2 4 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No.

DISPOSITION

Rework	☐
Scrap	☐
Use-as-is	☐
Suspected Unapproved	☐

AGAINST DEPARTMENT/PROCESS

Skid-tube	☐	Cross tube	☐	Water Jet	☐	Engineering	☐
Machining	☐	Small Fab	☐	Prod. Eng. Coor.	☐	Quality	☐
Thermoforming	☐	Finishing	☐	Rec/Store/Packaging	☐	Other	☐
Large Fab	☐	Composite	☐	Supplier	☐		☐

Date :	Step #:	QTY Effective :	MRB (QSI042) Approval

Description Work Order Deviation	Disposition	Completed By
		Lead hand / Supervisor Approval Verification
		QC / QA Coordinator Approval

Root Cause

Environment	☐	☐	No Re-verfication
Design	☐	☐	Operator
Doc/Data	☐	☐	Offset/Setup
Equip/Tooling	☐	☐	Supplier
Handling/Pre	☐	☐	Training
Material	☐	☐	Use for Testing
Internal Transport	☐	☐	Poor Information
Tribal Knowledge	☐	☐	Rushing
LOA	☐	☐	Product Improvement
Substation	☐	☐	Process Improvement
Past Expiry Date	☐	☐	Manufacturing Process
Misidentified	☐	☐	Past Due

FAULT CATEGORY

☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong
☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions
☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance
☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect
☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing
☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved
☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing
☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish
☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread
☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence

☐ OTHER :

U/R

Work Order ID 149242

Monday, July 25, 2016 12:49:31 PM

149242 DRAB GREEN

Item ID: D412-742-013DG **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: URF 16-572 **Stop** *NS2*

Item Name: Skidtube Fits LH or RH High Gear, DART (Apical) Tri-Bag Float Compatible, Drab Green

Start Date: 9/30/2016 **Start Qty:** 1.00 *1*

Required Date: 10/31/2016 **Req'd Qty:** 1.00 *1*

Cust Item ID:

Customer:

Reference: DAS 21 9-89

Approvals: **Process Plan:** _____ **Date:** JUL 2 5 2016 **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	**Revision Nbr**								
IIN D412-742	E								
100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	**Memo**	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile and create labels per PPP D412-742-013 CHG008								
110	Pick Kit	0.00							
110									
Packaging	**Memo**	0.00							
Packaging									
	QC4- 100% Inspect kits for completeness	0.00							
20									
	Memo	0.00							
ity Control									

AUG 2 4 2016 DAS 21 9-89 AUG 2 9 2016

DAS 21 9-89

1

Change Record

Part Number: D412-742-013

Description: FLOAT SKIDTUBE

CHG #	DATE	BY	RELEVANT DOCUMENTS	ECN #
001	05.08.23	KJ	DR-D412-742 REV A	
002	07.01.31	KJ	DSI 9364 REV A, MDL-D412-742 REV H	
003	07.04.17	KJ	D3391 REV F, MDL-D412-742 REV H	
004	07.10.30	KJ	D3391 REV G, D3670 REV A, D3672 REV B, DR-D412-742 REV H,	
			MDL-D412-742 REV J	
005	08.08.18	KJ	DSI 9364 REV C	08-510
006	09.01.22	KJ	DSI 9441 REV A	09-505
007	12.01.12	KJ	IIN-D412-742 REV E, ICA-D412-742 REV 4	12-506
008	16.01.11	KJ	D4095 REV C	16-504
009	16.04.28	KJ	D3391 REV J, D3403 REV E	16-516

RENCE ONLY

5.2 D412-742-013 (APICAL TRI-BAG) Float Skidtube Installation Parts List

Item	Qty -013	Qty -043	Part Number	Description
	X		D412-742-013	FLOAT SKIDTUBE INSTALLATION
	1	X	D412-742-043	FLOAT SKIDTUBE
		1	D3391-043	412 FLOAT SKIDTUBE
1		*24	*AN3C4A	*BOLT
3		*10	*AN3C6A	*BOLT
4		*4	*AN3C7A	*BOLT
5		*38	*AN960C10L	*WASHER
21		*1	*D4095-041	*WEARSHOE (REPLACES D3564-1)
22		*1	*D4095-043	*WEARSHOE (REPLACES D3564-3)
23		*1	*D4095-045	*WEARSHOE (REPLACES D3564-5)
10		*1	*D3391-021	*412 FORWARD TUBE
11		**1	**D3401-041	**TOW CAP
12A		**10	**AELS-1032-225	**INSERT (REPLACES NAS1330S3KB166)
13		**10	**AN3C4A	**BOLT
14A		**4	**D3672-1	**WASHER (REPLACES NAS1515H3L)
14B		**10	**AN960C10L	**WASHER
24		**1	**D4095-051	**WEARSHOE (REPLACES D3564-13)
20		*1	*D3391-023	*412 MID TUBE
28		**20	**AELS-1032-130	**INSERT (REPLACES NAS1330S3KB116)
30		*1	*D3391-025	*412 AFT TUBE
25		**1	*D4095-049	**WEARPAD (REPLACES D3537-1)
26		**1	*D4095-047	**WEARPAD (REPLACES D3537-7)
31		**1	**D2646	**AFT CAP
32		**14	**AELS-1032-130	**INSERT
36		**8	**AELS-1032-225	**INSERT (REPLACES NAS1330S3KB366)
37A		**6	**AN3C4A	**BOLT
37B		**4	**AN3C5A	**BOLT
38A		**2	**D3672-1	**WASHER (REPLACES NAS1515H3L)
38B		**10	**AN960C10L	**WASHER

(CONTINUED ON PAGE 20)

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(CONTINUED FROM PAGE 19)

Item	Qty -013	Qty -043	Part Number	Description
40	1		D2571	SADDLE, FWD OUTSIDE
41	1		D2572	SADDLE, FWD INSIDE
42	1		D2573	SADDLE, AFT OUTSIDE
43	1		D2574	SADDLE, AFT INSIDE
44	2		D2876	SADDLE SPACER
45	2		D2877	SADDLE SPACER
46A	8		D3403-1	BUSHING
46B	8		D3403-5	BUSHING
47A	4		D2747	SET SCREW
47B	2		D3533-1	SET SCREW
48	16		AN4C6A	BOLT
49A	4		AN4C52A	BOLT
49B	4		AN4C53A	BOLT
50	8		AN6C12A	BOLT
51A	32		D3672-3	WASHER (REPLACES NAS1515H4L)
51B	32		AN960C416L	WASHER
52A	8		D3672-9	WASHER (REPLACES NAS1515H6L)
52B	8		AN960C616L	WASHER
53	8		D3672-11	WASHER (REPLACES NAS1515H7L)
54	24		MS21043-4	NUT
55	4		AN4C7A	BOLT
56	2		D3591-1	BUSHING
60	8		D3403-3	BUSHING
61	1		D3405-041	GHW LUG
62	1		D3405-043	GHW LUG
63	4		AN4C47A	BOLT
64	4		MS21043-4	NUT
70	1		D3407-041	TOW RING
71	2		D3417-3	WASHER
72	1		MS21043-4	NUT
73	1		D3456-1	WASHER
91	1		AN3C37A	BOLT
92	1		AN3C40A	BOLT
93	1		AN3C41A	BOLT
94	1		AN3C42A	BOLT
95	4		AN3C43A	BOLT
97	5		AN3C46A	BOLT
99	26		AN960C10L	WASHER
100	13		MS21043-3	NUT

*DENOTES PART IS INCLUDED WITH D3391-043 ASSEMBLY ABOVE
**DENOTES THAT PART IS INCLUDED WITH ASSEMBLY ABOVE

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